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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,698	09/30/2003	Sandeep K. Gopisetty	ARC920030056US1	7968

7590 01/10/2007
Mark C. McCabe
IBM Corporation IP Law C4TA/J2B
650 Harry Road
San Jose, CA 95120

EXAMINER

AUGUSTINE, NICHOLAS

ART UNIT	PAPER NUMBER
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2179

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/676,698	Applicant(s) GOPISETTY ET AL.	
	Examiner Nicholas Augustine	Art Unit 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Battat et al (US 5,958,012).

As for independent claim 1, Battat teaches a storage area network (SAN) management system to generate perspectives of a SAN topology (col.4, line 48), the SAN management system including: a SAN manager program to monitor a storage area network (SAN) (col.7, line 61 and col.8, line 5); a SAN management database linked with the SAN manager program (col.7, lines 61-63 and fig.1, 102-103), wherein the SAN management database maintains information identifying devices included within the SAN and connections between the devices (fig.10 and col.8, line 11; wherein a agent interacts with the database/ repository to obtain object information; col.11, line 34); a plurality of sensor agents positioned within devices included within the SAN (104, col.8, lines 11-14 and fig.1), wherein the sensor agents gather information associated with

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events occurring within the SAN and provide the gathered information to the SAN manager for inclusion within the SAN management database (Col.8, lines 11-14 and fig.1; wherein is depicted of sending events and notifications to the management application); and a topology viewer linked to the SAN manager to generate a user requested topology perspective according to data included within the SAN management database and data associated with a previously requested topology perspective (col.9, lines 39-41 and col.5, line 25; fig.1 and 6; wherein figure 6 deals with the rendering of the current scene to the display device).

As for dependent claim 2, Battat teaches the system of claim 1 wherein the SAN includes hosts, storage devices and switches (col.11, line 2).

As for dependent claim 3, Battat teaches the system of claim 2 wherein the host comprises a database server or a file server (col.10, line 45).

As for dependent claim 4, Battat teaches the system of claim 1 wherein the topology perspective is generated for all devices within the SAN which are visible to a particular host (fig.1, 2, 11 and col.13, line 64).

As for dependent claim 5, Battat teaches the system of claim 1 wherein the topology perspective is generated for all devices within the SAN which are visible to a particular storage device (col.11, line 1).

As for dependent claim 6, Battat teaches the system of claim 1 wherein a previously requested topology perspective is utilized by the topology viewer in the generation of a new user requested topology perspective (fig.2 and 3).

As for dependent claim 7, Battat teaches the system of claim 6 the topology viewer includes a memory for storing information pertaining to the previously requested topology perspectives (col.10, line 12 and 101,102).

As for dependent claim 8, Battat teaches the system of claim 7 wherein the information pertaining to previously requested topology perspectives includes paths which provide access between devices within the SAN (fig.11;wherein is depicted paths of connections between devices, etc).

As for independent claim 9, Battat teaches a method for generating a perspective of a SAN topology, comprising: receiving a request to provide a perspective of a SAN topology (col.8, line 36); identifying data paths within the requested perspective that have been previously calculated; calculating data paths within the requested perspective which have not been previously calculated; and generating the requested perspective according to both the previously calculated data paths and the calculated data paths (col.9, line 8; wherein the system is calculating the path of navigation from the user and to what devices show up in the object viewer at the instance of time to

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which the user is at then to which the calculation of other aspects are added into the provide a smooth navigation within a viewer space/ perspective).

As for dependent claim 10, Battat teaches the method of claim 9 wherein the perspective includes all SAN devices within the SAN topology which are connected to an identified SAN device and all SAN devices which are accessible to the identified SAN device, wherein the identified SAN device is included within the SAN topology (col.11, line 1; wherein the system includes all device relevant and active in a defined area).

As for dependent claim 11, Battat teaches the method of claim 10 wherein the perspective includes a graphical map of all devices within the SAN topology which are visible to the identified device, connections between all of the devices included within the graphical map (fig.11 and 16; wherein figure 11 shows connection lines between devices and figure 16 shows devices connected as described in the related teachings of Battat).

As for dependent claim 12, Battat teaches the method of claim 10 wherein the identified SAN device includes a host, a storage device and a switch (col.11, line 2).

As for dependent claim 13, Battat teaches the method of claim 12 wherein the host comprises a database server or a file server and the storage devices comprise JBODs

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and storage controllers (col.10, line 45 and col.11, line 1; wherein the viewer of the system can define any type of network device such as redundant array of inexpensive disk / RAID/ JBOD).

As for dependent claim 14, Battat teaches a SAN management system device including system readable code readable by a server system for generating a perspective of a SAN topology (fig.1 and col.7, line 60), *comprising: logic means for receiving a request to provide a perspective of a SAN topology; logic means for identifying data paths within the requested perspective that have been previously calculated; logic means for calculating data paths within the requested perspective which have not been previously calculated; and logic means for generating the requested perspective according to both the previously calculate data paths and the calculated data paths, whereby the perspective includes all SAN devices within the SAN topology which are connected to an identified SAN device and all SAN devices which are accessible to the identified SAN device, wherein the identified SAN device is included within the SAN topology, whereby the SAN device includes a host, a storage device and a switch* (note the analysis of claims 9 – 13).

As for independent claim 15, Battat teaches a method of updating each of a cache of including perspectives of hosts, devices and switches in a SAN, based on a change to the SAN's configuration or an identification of devices missing from the SAN's configuration (col.8, line 13 and fig. 1-4).

It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006,1009, 158 USPQ 275, 277 (CCPA 1968)).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

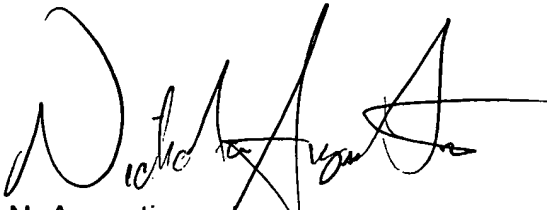
- US – 20040064545: Integrated topology management method for storage and IP networks
- US-20020113816: METHOD AND APPARATUS PROVIDING A GRAPHICAL USER INTERFACE FOR REPRESENTING AND NAVIGATING HIERARCHICAL NETWORKS
- US-6885387: Virtual network displaying system
- US-6789090: Display method and apparatus having control of displayed icon
- US-20050071482: System and method for generating perspectives of a SAN Topology
- US-20040215304: System and method for assigning data collection agents to storage area network nodes in a storage area network resource management system

Inquires

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056. The examiner can normally be reached on Monday - Friday: 7:30- 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


N. Augustine
December 22, 2006

Nicholas Augustine
Examiner
AU: 2179


BA HUYNH
PRIMARY EXAMINER